

ORIGINAL ARTICLE

Variation in clinical practice in genitourinary medicine clinics in the United Kingdom

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Objectives: This study was conducted to examine the variation in clinical practice in genitourinary medicine clinics in the United Kingdom in early 2002.

Methods: Questionnaires were sent to all 234 consultants in charge of genitourinary medicine clinics in the United Kingdom in March–May 2002. The questions concerned clinical practice in respect of asymptomatic patients presenting for an infection screen, and practice in respect of some specific sexually transmitted and other genitourinary infections.

Results: The test for infection least likely to be offered to heterosexuals is an HIV test (71% and 70% of clinics routinely offer this to male and female heterosexuals respectively). The practice of permitting "low risk" patients to telephone for their HIV results now extends to 24% of clinics. 34% of clinics do not require patients with non-specific urethritis to attend for follow up. 41% of clinics routinely ask patients treated for *Chlamydia trachomatis* to return for a follow up chlamydia detection test. 25% of clinics routinely offer two tests of cure to all patients with gonorrhoea. 6% of clinics do not routinely offer syphilis serology to heterosexuals. Other significant variations in clinical practice were documented.

Conclusions: Overall, our findings indicate the need for further evidence to guide clinical practice and a wider knowledge and debate of national guidelines.

Attendances at genitourinary medicine clinics in the United Kingdom have risen sharply over recent years,¹ often resulting in diminished ease of access for patients.² This has led clinics to adapt their clinical practice to cope with the increasing workload. Clinicians in the United Kingdom have benefited greatly in recent years from the development of national guidelines³ that should lead to a higher standard and greater uniformity of clinical practice. But other changes may not follow evidence based guidelines,^{3–4} may be counterproductive and lead to a lowering of quality standards.

This study was conducted to examine the extent of variation in clinical practice in genitourinary medicine clinics in the United Kingdom in early 2002.

METHODS

The British Co-operative Clinical Group (BCCG) was established in 1951 "for the immediate purpose of collecting information concerning venereal diseases from case records available in this country."⁵ The broadening of the scope of clinical practice in clinics has been accompanied by a wider range of interest for the BCCG.

Questionnaires were sent to all 234 consultants in charge of genitourinary medicine clinics in the United Kingdom in March–May 2002. Some consultants are in charge of two or three clinics but only made a return for one clinic; 183/234 (78%) responses were received via the BCCG's network of regional representatives.

The questions concerned clinical practice in respect of asymptomatic male homosexual, heterosexual, bisexual, and female patients presenting for an infection screen (potentially including tests for syphilis, hepatitis A, B, and C, HIV tests, as well as swabs/urine tests); "non-specific" urethritis; vaginal infections; genital warts; *Chlamydia trachomatis*; gonorrhoea, and policies on HIV testing.

RESULTS

Tables 1–3 indicate the variation in practice between clinics in respect of tests offered routinely to all asymptomatic male heterosexual, female, and homosexual/bisexual patients presenting for an infection screen.

In all, 170/181 (94%) of clinics offer a full infection screen to all patients requesting an HIV test; 42/176 (24%) of clinics invite "low risk" patients to telephone for their HIV results. Of these 42 clinics only seven have, to date, given HIV positive results over the telephone. Of these seven, one noted that "equivocal results cause a little consternation" while two others recorded protocol lapses—for example, high risk patients being given results over the telephone.

A total of 109/165 (66%) clinics ask all male patients with "non-specific" urethritis to return for a test of cure; 7/179 (4%), 13/180 (7%), and 165/178 (93%) clinics ask women with vaginal candidiasis, bacterial vaginosis, and vaginal trichomonas, respectively, to return for a test of cure.

Fifty of 171 (29%) clinics do not review all patients provided with home therapy with podophyllotoxin or imiquimod for genital warts; 72/175 (41%) clinics routinely ask all patients

Table 1 Tests offered routinely to all asymptomatic male heterosexual patients presenting for an infection screen

Test	No of clinics offering test	Total No of clinics	%
Syphilis serology	169	179	94
Urethral smear from Gram staining	160	176	91
Visual examination of first pass urine	151	180	84
<i>C trachomatis</i> identification	180	180	100
<i>N gonorrhoeae</i> identification	176	183	96
HIV test	125	176	71

Table 2 Tests offered routinely to all asymptomatic female patients presenting for an infection screen

Test	No of clinics offering test	Total No of clinics	%
Syphilis serology	167	177	94
Gram staining			
of vagina	166	180	92
of cervix	164	178	92
of urethra	145	179	81
Wet preparation of vagina	172	183	94
<i>C. trachomatis</i> identification	179	179	100
<i>N. gonorrhoeae</i> identification	179	180	99
HIV test	124	177	70
Additional test(s) for bacterial vaginosis	82	177	46
Candida culture	141	178	79
<i>T. vaginalis</i> culture	63	178	35

Table 3 Tests offered routinely to all asymptomatic homosexual/bisexual patients presenting for an infection screen

Test	No of clinics offering test	Total No of clinics	%
Syphilis serology	173	176	98
Urethral smear for Gram staining	164	180	91
<i>C. trachomatis</i> identification (from urethra)	178	180	99
<i>N. gonorrhoeae</i> identification (from urethra)	178	179	99
HIV test	164	177	93
Hepatitis serology			
A	66	174	38
B	174	179	97
C	48	164	29
Throat specimen for <i>N. gonorrhoeae</i>	165	177	93
Rectal specimen for <i>N. gonorrhoeae</i>	164	176	93

treated for proved *Chlamydia trachomatis* to return for a test of cure by a chlamydia detection test.

Patients treated for *Neisseria gonorrhoeae* are routinely asked to return for no tests of cure in 1/179 (1%) clinics, for one test of cure in 100/179 (55%), and two tests of cure in 44/179 (25%). In 38/179 (21%) the number of tests of cure varies.

DISCUSSION

This study has demonstrated considerable variation in some clinical practices in genitourinary medicine clinics in the United Kingdom. This variation occurs in some situations because there is no consensus or evidence based guideline governing clinical practice. In other situations such guidance exists but is not universally followed. The test for infection least likely to be offered to heterosexuals is an HIV test (only 71% and 70% of clinics routinely offer this to male and female heterosexuals respectively). The National Strategy for Sexual Health and HIV will require all genitourinary medicine clinic attenders to be offered this test on their first screening for sexually transmitted infections by the end of 2004.⁶

This policy is intended to reduce the number of undiagnosed HIV infected people. As HIV testing increases within genitourinary medicine clinics, workloads will inevitably rise. This rise will be especially marked if all patients are required to return to receive their HIV result. Some patients may be deterred from being tested if required to return for the result. This study shows that the practice of permitting "low risk" patients to telephone for their HIV results now extends to 24% of clinics. The occasion of giving the result may still provide an

opportunity for "post-test counselling". As stated in the European guidelines, although "the majority of HIV tests are negative . . . the consultation in which the client receives his result may be a fruitful moment in underscoring some of the points from the pretest counselling."⁷

The practice of giving HIV results over the telephone may reflect the growing "normalisation" of HIV infection and a move away from a more paternalistic approach which denies patients the choice of whether to telephone for an HIV result while allowing them to telephone for other results. Nevertheless, there is a need for proper assessment of this practice by audit and patient satisfaction surveys to allow informed debate within the speciality.

Despite the recent outbreaks of syphilis in the United Kingdom⁸ among heterosexuals (as well as those among homosexuals) 6% of clinics do not routinely offer syphilis serology to male or female heterosexuals. 3/176 (2%) clinics fail to offer syphilis serology routinely to homosexual/bisexual patients.

Microscopy of urethral smears is not performed for asymptomatic non-specific urethritis in 9% of clinics. The consequences of this omission for the health of the individual and the public are not known. *Chlamydia trachomatis* is, however, screened for in 99–100% of cases. The continued use of the two-glass urine test has been questioned⁹ and 16% of clinics now omit visual examination of first pass urine.

Microscopy of cervical specimens from asymptomatic women is omitted in 8% of clinics, thereby making it unlikely that unknown contacts of gonorrhoea will be diagnosed at their first attendance and presumably causing potential problems with their recall for treatment and the possible transmission of infection in the meantime. Nineteen per cent of clinics omit microscopy of urethral specimens from women. Barlow found that microscopy of urethral samples in women contributed only an extra 2.6% to the rate of presumptive diagnoses of gonorrhoea.¹⁰ In contrast, Goh later found that urethral microscopy allowed a presumptive diagnosis to be made in 181/1148 (15.8%) women with urethral and/or cervical gonorrhoea, which would have been missed on cervical microscopy alone.¹¹ It may be argued that the prevalence of gonorrhoea is low in some areas and, therefore, the small chance of finding a positive result does not justify the time spent on microscopy of these specimens.

The omission of candida culture by 21% of clinics may be justified by the lack of obvious benefit from diagnosing asymptomatic candidiasis. *Trichomonas* is not cultured for routinely by 65% of clinics despite the sensitivity of microscopy being only 50–70% in expert hands,¹² and although it is possible to culture for *trichomonas* together with candida in a single medium.¹³

Sixty six per cent of clinics require all patients with non-specific urethritis to attend for a follow up test of cure. The UK Clinical Effectiveness Guideline states that although follow up is an important part of management, "repeat urethral smear and first pass urine specimen to look for persistent urethritis (is only necessary) if the patient is symptomatic or has a urethral discharge on examination".¹⁴

Twenty nine per cent of clinics providing home treatment for genital warts do not require all patients to return for follow up. Clearly this has advantages for patients and clinics and is a further move towards greater autonomy for the patient but, at the same time, it increases the risk that persistent warts will remain untreated with a possible greater risk of onward transmission. The national guideline indicates the need to review the patient at the end of the course of treatment to monitor response, etc.¹⁵

Forty one per cent of clinics routinely ask patients treated for *Chlamydia trachomatis* infection to return for a follow up chlamydia detection test, which operates both as a test of cure and a test of re-infection. However, Radcliffe *et al* found that "routine test of cure is unnecessary following appropriate

anti-chlamydial therapy;¹⁶ and both the UK Clinical Effectiveness Group Guideline¹⁷ and the European Guideline¹⁸ state that microbiological follow up is not strictly necessary after treatment with doxycycline or azithromycin. Both guidelines, however, acknowledge the potential uses of follow up for health education, follow up of partner notification, and reassurance. In contrast, the practice of 25% of clinics routinely offering two tests of cure to all patients with gonorrhoea may be judged to be unnecessary and expensive.¹⁹

There is a high degree of uniformity of approach in screening asymptomatic homosexual/bisexual men except in respect of hepatitis A and C. The relevant clinical effectiveness guideline of the Medical Society for the Study of Venereal Diseases is non-committal on the need to screen homosexual men for hepatitis A and recommends "considering screening for hepatitis C in gay men."²⁰

The large increases in attendances at genitourinary medicine clinics in recent years has caused difficulties of access. Waiting for appointments increases the duration of infectiousness which, according to mathematical models, is proportional to the average number of secondary cases of infection.²¹ In addition, clinical practices may have been modified in an attempt to make genitourinary medicine clinics more efficient. This study describes considerable variation in clinical practice. This variation appears to arise partly because of the lack of evidence to guide the clinician and partly because guidelines are not always adhered to. Wider knowledge and debate about the content of guidelines may be necessary to ensure that they are more widely adopted. Some variations in clinical practice may be counterproductive to achieving good sexual health in the individual and in the community.

CONTRIBUTORS

CAC initiated the study, wrote each draft of the questionnaire, and each draft of the paper; RW, EF, DR, and PK contributed to the revisions of the questionnaire and the paper; RW coordinated the distribution and collection of the questionnaires nationally. Regional Representatives (see below) of the BCCG coordinated the distribution and collection of questionnaires within their respective regions.

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